

11NA\_SEQUENCE 1.0

ID ABA03337 standard; DNA; 18 BP.

XX

AC ABA03337;

XX

DT 12-FEB-2002 (first entry)

XX

DE S chrysomallus actinomycin biosynthase gene acmc fragment #5.

XX

KW Modular enzyme system; cyclic gene synthesis; repetitive coding sequence;

KW antibiotic; non-ribosomal peptide synthetase; NRPS; PRS;

KW polyketide synthase; actinomycin biosynthase; ds.

XX

OS Streptomyces chrysomallus.

XX

FH Key Location/Qualifiers

XX

FT CDS 1..18 /\*tag= a /product= "antimycin biosynthesis protein fragment"

XX

FT /partial /note= "no start or stop codon"

XX

PN WO200181564-A2.

XX

PP 01-NOV-2001.

XX

PF 25-APR-2001; 2001WO-DE01578.

XX

PR 26-APR-2000; 2000DE-1021267.

XX

PA (ACTI-) ACTINODRUG PHARM GMBH.

XX

PT Schauwecker F;

XX

DR WPI; 2002-049276/06.

XX

PT preparing DNA encoding modular protein for e.g. producing new enzymes

PT for synthesis of polyketide antibiotics, comprises cyclic integration

XX

PS Example 3; Page 53; 83pp; German.

XX

CC The present invention relates to the preparation of DNA, in a circular vector, that encodes one or more segments of a modular polypeptide. DNA or RNA libraries produced this way are used to produce modular polypeptides, particularly enzymes, which can be used to act on substrates to produce compounds for therapeutic testing. Enzymes of particular interest are those involved in non-ribosomal peptide synthesis or polyketide synthesis, and compounds for testing are particularly useful. CC antibiotics, including penicillins, vancomycins or CC erythromycins, but may also be modular receptors. The present sequence is CC a fragment of a Streptomyces chrysomallus actinomycin biosynthesis gene which was used in the exemplification of the invention.

XX

SQ Sequence 18 BP; 0 A; 8 C; 9 G; 1 T; 0 other;

ABA03337 Length: 18 July 23, 2002 13:35 "Type: N Check: 1933 ..

1 GCGCGGTGG CGGCCCGG

09/24 797

1 DNA-SEQUENCE 1.0  
 ID ABA03339 standard; DNA; 18 BP.  
 XX  
 AC ABA03339;  
 XX  
 DT 12-FEB-2002 (first entry)  
 XX  
 DE S chrysomallus actinomycin biosynthase gene acmc fragment #7.  
 XX  
 KW Modular enzyme system; cyclic gene synthesis; repetitive coding sequence;  
 KW antibiotic; non-ribosomal peptide synthetase; NRPS; pRS; ds;  
 KW polyketide synthase; actinomycin biosynthase; ds.  
 XX  
 OS Streptomyces chrysomallus.  
 OS Synthetic.  
 XX  
 FH key Location/Qualifiers  
 FT CDS 1..18  
 FT /tag= a  
 FT /product= "antinomycin biosynthesis protein fragment"  
 FT /partial  
 FT /note= "no start or stop codon"  
 XX  
 PN WO200181564-A2.  
 XX  
 PD 01-NOV-2001.  
 XX  
 PT 25-APR-2001; 2001WO-DE01578.  
 XX  
 PR 26-APR-2000; 2000DE-1021267.  
 XX  
 PA (ACTI-) ACTINODRUG PHARM GMBH.  
 XX  
 PT Schauwecker F;  
 XX  
 DR WPI; 2002-049276/05.  
 DR P-PSDB; AAW47149.  
 XX  
 PT preparing DNA encoding modular protein for e.g. producing new enzymes  
 PT for synthesis of polyketide antibiotics, comprises cyclic integration  
 PT of fragments into a vector  
 XX  
 PS Example 3; Page 53; 83pp; German.

XX  
 CC The present invention relates to the preparation of DNA, in a circular  
 CC vector, that encodes one or more segments of a modular polypeptide. DNA  
 CC or DNA libraries produced this way are used to produce modular  
 CC polypeptides, particularly enzymes, which can be used to act on  
 CC substrates to produce compounds for therapeutic testing. Enzymes of  
 CC particular interest are those involved in non-ribosomal peptide synthesis  
 CC or polyketide synthesis, and compounds for testing are particularly  
 CC macrocyclic antibiotics, including penicillins, vancomycins or  
 CC erythromycins, but may also be modular receptors. The present sequence is  
 CC a fragment of a *Streptomyces chrysomallus* actinomycin biosynthesis  
 CC gene which was used in a plasmid in the exemplification of the invention.  
 XX  
 SQ Sequence 18 BP; 0 A; 8 C; 9 G; 1 T; 0 other;  
 ABA03339 Length: 18 July 23, 2002 13:35 Type: N Check: 1933

1 CGCGCGTGG CGCCCCG

! !NA\_SEQUENCE 1.0  
ID AAH23259 standard; DNA; 20 BP.  
XX  
AC AAH23259;  
XX  
DT 17-SEP-2001 (first entry)  
XX  
DE Human MMIF mRNA inhibiting antisense oligo ISIS #115633.  
XX  
KW Macrophage migration inhibitory factor; MMIF; antisense; neurological;  
KW hyperproliferation; nootropic; antinormal; immunosuppressive; human;  
KW antiinflammatory; cytostatic; ss.  
XX  
OS Synthetic.  
OS Homo sapiens.  
XX  
PN WO200153317-A1.  
XX  
PD 26-JUL-2001.  
XX  
PF 16-JAN-2001; 2001WO-US01475.  
XX  
PR 20-JAN-2000; 2000US-0489869.  
XX  
PA (ISIS-) ISIS PHARM INC.  
XX  
PT Murray SF, Cowser LM, Wyatt JR;  
XX  
DR WPI; 2001-451899/48.  
XX  
PT New antisense compound(s) are useful to inhibit a nucleic acid molecule  
PT encoding macrophage migration inhibitory factor -  
XX  
PS Example 15; Page 83; 105pp; English.  
XX  
CC The invention relates to antisense oligonucleotides 8-30 nucleotides in  
CC length targeted to a nucleic acid molecule encoding macrophage migration  
CC inhibitory factor (MMIF), where the antisense compound specifically  
CC hybridizes with and inhibits the expression of MMIF. The antisense  
CC nucleotides are useful for the treatment of a disease or condition  
CC associated with MMIF such as neurological, hormonal, immune, inflammatory  
CC or hyperproliferative disorder. Sequences AAH23191-268 represent chimeric  
CC antisense phosphorothioate oligonucleotides used for inhibition of human  
CC MMIF mRNA expression.  
XX  
Sequence 20 BP; 3 A; 6 C; 2 T; 0 other;  
SQ

AAH23259 Length: 20 July 23, 2002 13:35 Type: N Check: 4497 ..

1 CGACCTCGTC GGGCCCGAA

!1NA\_SEQUENCE 1.0  
 ID AAI74686 standard; DNA; 51 BP.  
 XX  
 AC AAI74686;  
 XX  
 DT 09-Nov-2001 (first entry)  
 XX  
 DE Human silent SNP containing nucleic acid SEQ:1627.  
 XX  
 KW Human; single nucleotide polymorphism; SNP; genome; gene therapy;  
 KW protein therapy; vaccine; probe; diagnostic assay; detection;  
 KW quantitation; restorative therapy; polymorphic; ds.  
 XX  
 OS HOMO sapiens.  
 XX  
 PN WO200140521-A2.  
 XX  
 PD 07-JUN-2001.  
 XX  
 PR 30-NOV-2000; 2000WO-US32758.  
 XX  
 PR 30-NOV-1999; 99US-0168138.  
 PR 29-NOV-2000; 2000US-0726173.  
 XX  
 PA (CURA-) CURAGEN CORP.  
 XX  
 PI Shimkets RA, Leach M;  
 XX  
 DR WPI; 2001-356160/37.  
 XX  
 XX  
 PT polymorphic nucleic acid sequences, useful in genetic testing and  
 PT therapy.  
 XX  
 PS Claim 1; Page 551; 2653pp; English.  
 XX  
 CC AAI73060 to AAI79857 represent isolated human polymorphic polynucleotide  
 CC sequences (1), which contain single nucleotide polymorphisms (SNPs).  
 CC AAM53114 to AAM53329 represent peptides related to human polymorphic  
 CC polynucleotide sequences. The sequences can be used in gene and protein  
 CC therapy, and in vaccine production. (1) and the polypeptides encoded by  
 CC them may be used in the prevention, diagnosis and treatment of diseases  
 CC associated with inappropriate expression of polymorphic polypeptides.  
 CC For example, (1) may be used to treat disorders by rectifying mutations  
 CC or deletions in a patient's genome that affect the activity of  
 CC polypeptides by expressing inactive proteins or to supplement the  
 CC patients own production of polypeptide. Additionally, (1) and its  
 CC complementary sequences may also be used as DNA probes in diagnostic  
 CC assays to detect and quantitate the presence of similar nucleic acids  
 CC in samples, and therefore which patients may be in need of restorative  
 CC therapy. The polypeptides encoded by (1) may be used as antigens in the  
 CC production of antibodies specific for polymorphic polypeptides. The  
 CC antibodies may also be used to down regulate expression and activity.  
 CC The antibodies may also be used as diagnostic agents for detecting the  
 CC presence of polymorphic polypeptides in samples.  
 XX  
 Sequence 51 BP; 7 A; 20 C; 17 G; 7 T; 0 other;  
 SQ  
 AAI74686 Length: 51 July 23, 2002 13:35 Type: N Check: 3097 ..  
 1 GGCTGCGAG CTCATCTCCG GCGGACGGT CAACGACGTC GAGCTGCCGC

51 G

! ! NA\_SEQUENCE 1.0  
 ID AAI74687 standard; DNA; 51 BP.  
 XX  
 AC AAI74687;  
 XX DT 09-NOV-2001 (first entry)  
 XX DE Human silent SNP containing nucleic acid SEQ:1628.  
 KW Human; single nucleotide polymorphism; SNP; genome; gene therapy;  
 KW protein therapy; vaccine; probe; diagnostic assay; detection;  
 KW quantitation; restorative therapy; Polymorphic; ds.  
 XX OS Homo sapiens.  
 PA WO200140521-A2.  
 XX PN 07-JUN-2001.  
 XX PD 30-NOV-2000; 2000WO-US32758.  
 XX PR 30-NOV-1999; 99US-0168138.  
 XX PR 29-NOV-2000; 2000US-0726173.  
 XX PA (CURA-) CURAGEN CORP.  
 XX PT Shimkets RA, Leach M;  
 XX DR WPI; 2001-356160/37.  
 XX PT Polymeric nucleic acid sequences, useful in genetic testing and  
 PT therapy -  
 XX PS Claim 1; Page 552; 2653pp; English.  
 XX  
 CC AAI73050 to AAI79867 represent isolated human polymorphic polynucleotide  
 CC sequences (I), which contain single nucleotide polymorphisms (SNPs).  
 CC AAI53114 to AAI53329 represent peptides related to human polymorphic  
 CC polynucleotide sequences. The sequences can be used in gene and protein  
 CC therapy, and in vaccine production. (I) and the polypeptides encoded by  
 CC them may be used in the prevention, diagnosis and treatment of diseases  
 CC associated with inappropriate expression of polymorphic polypeptides.  
 CC For example, (I) may be used to treat disorders by rectifying mutations  
 CC or deletions in a patient's genome that affect the activity of  
 CC polypeptides by expressing inactive proteins or to supplement the  
 CC patients own production of polypeptide. Additionally, (I) and its  
 CC complementary sequences may also be used as DNA probes in diagnostic  
 CC assays to detect and quantitate the presence of similar nucleic acids  
 CC in samples, and therefore which patients may be in need of restorative  
 CC therapy. The polypeptides encoded by (I) may be used as antigens in the  
 CC production of antibodies specific for polymorphic polypeptides. The  
 CC antibodies may also be used to down regulate expression and activity.  
 CC The antibodies may also be used as diagnostic agents for detecting the  
 CC presence of polymorphic polypeptides in samples.  
 XX Sequence 51 BP; 6 A; 21 C; 17 G; 7 T; 0 other;  
 SQ

AAI74687 Length: 51 July 23, 2002 13:36 Type: N Check: 3149 ..

1 GGCGTGCAG CTCATCTCCG GCGGCCGGR CAACGACGTC GAGCTGCCG

! DNA\_SEQUENCE 1.0  
 ID AAF89799 standard; DNA; 71 BP.  
 XX  
 AC AAF89799;  
 XX  
 DT 23-JUL-2001 (first entry)  
 XX  
 DE PCR primer used to amplify Renilla green fluorescent protein.  
 XX  
 KW Retroviral vector; Renilla; green fluorescent protein; pgFP; rGFP;  
 KW PCR primer; ss.  
 XX  
 Renilla muelleri.  
 XX  
 OS WO200134824-A2.  
 PN XX  
 PR 10-NOV-1999; 99US-0164592.  
 XX  
 PA (RIGE-) RIGEL PHARM INC.  
 XX  
 PI Anderson D;  
 XX  
 DR WPI; 2001-329091/34.  
 XX  
 PT Novel retroviral vector, containing gene encoding Renilla green  
 PT fluorescent protein, useful as reporter for cell assays, particularly  
 PT intracellular assays -  
 XX  
 PS Example; Page 71; 83pp; English.  
 XX  
 CC The specification describes a retroviral vector comprising a Renilla  
 CC green fluorescent protein (pgFP or rGFP) gene. pgFP and rGFP proteins  
 CC are useful as reporters for cell assays, particularly intracellular  
 CC assays including methods of screening libraries using pgFP or rGFP, and  
 CC for screening protein-protein, nucleic acid-protein or nucleic  
 CC acid-nucleic acid interactions. pgFP or rGFP proteins are also useful  
 CC in cellular assays, including assays for alterations in exocytosis,  
 CC cell cycle regulation, apoptosis, cellular proliferation and/or  
 CC differentiation. pgFP or rGFP proteins are also useful for elucidating  
 CC bioactive agents that can cause a population of cells either to move  
 CC out of one growth phase into another, or to arrest in a growth phase.  
 CC pgFP or rGFP proteins are also useful for screening bioactive agents for  
 CC their ability to modulate cell cycle regulation, including the activation  
 CC or suppression of cell cycle checkpoint pathways and ameliorating  
 CC checkpoint defects. PCR primers AAF89799-AAF89800 were used to amplify  
 CC cDNA fragments encoding rGFP. The amplified fragments were ligated  
 CC together, and used in the course of the invention.  
 XX  
 SQ Sequence 71 BP; 12 A; 24 C; 27 G; 8 T; 0 other;  
 XX  
 AAF89799 Length: 71 July 23, 2002 13:36 Type: N Check: 310 ..  
 1 CCTACGAGT GCCCGACTAC GCCAGCCTGG GCCAGCAGGT GGAGGCGACCG  
 51 GCGGCTGT GGAGATCCGC A

!1 NA\_SEQUENCE 1 0  
 ID AAX56578 standard; DNA; 99 BP.  
 XX  
 AC  
 XX  
 DT 11-SEP-2000 (first entry)  
 DE XX  
 Human 1752577 DNA fragment.  
 XX  
 KW Inflammatory cell infiltration; immune response; T cell proliferation; anti-inflammatory; anti-autoimmune; anti-diabetic; spondyloarthropathy; T cell-mediated disease; spondyloarthropathy; scleroderma; renal disease; inflammatory myopathy; hemolytic anemia; thrombocytopenia; Guillain-Barre syndrome; diabetes mellitus; demyelinating polyneuropathy; Guillain-Barre syndrome; multiple sclerosis; polyneuropathy; hepatitis; cirrhosis; enteropathy; sclerosing cholangitis; inflammatory bowel disease; Whipple's disease; skin disease; dermatitis; psoriasis; asthma; allergic rhinitis; tumor; food hypersensitivity; urticaria; eosinophilic pneumonia; transplant; idiopathic pulmonary fibrosis; graft rejection; PRO245; human; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN W0914241-A2.  
 XX  
 PD 25-MAR-1999.  
 XX  
 PF 17-SEP-1998; 98WO-US19437.  
 XX  
 PR 17-SEP-1997; 97US-0059119.  
 PR 18-SEP-1997; 97US-0059263.  
 PR 28-OCT-1997; 97US-0063550.  
 PR 12-NOV-1997; 97US-0065186.  
 PR 21-NOV-1997; 97US-0066364.  
 PR 24-NOV-1997; 97US-0066770.  
 PR 04-JUN-1998; 98US-0088026.  
 XX  
 PA (GETH ) GENENTECH INC.  
 XX  
 PI Fong S, Goddard A, Gurney AL, Tumas D, Wood WI;  
 XX  
 DR WPI; 1999-229499/19.  
 XX  
 PT Composition containing novel polypeptide PRO245, its agonist or antagonist -  
 XX  
 PS Disclosure; Figure 17A-V; 177PP; English.  
 XX  
 CC This invention describes a novel composition containing (apart from a carrier or excipient), a novel PRO245 polypeptide (I), its agonist or antagonist, or their fragments, for modulating: (i) infiltration of inflammatory cells into tissue; (ii) an immune response; or (iii) T cell proliferation. The composition increases or decreases any of the effects (i)-(iii). The products of the invention have anti-inflammatory, anti-autoimmune and anti-diabetic activity. (I), and its (antagonists and their fragments, are used to treat immune-related diseases particularly T cell-mediated diseases. The diseases treated include systemic lupus erythematosus, rheumatoid arthritis, juvenile chronic arthritis, spondyloarthropathies, systemic sclerosis (scleroderma), idiopathic inflammatory myopathies (dermatomyositis, polymyositis), Sjogren's syndrome, systemic vasculitis, sarcoidosis, autoimmune hemolytic anemia (immune pancytopenia, paroxysmal nocturnal hemoglobinuria), autoimmune thrombocytopenia (idiopathic thrombocytopenia), thyroiditis (Grave's disease, Hashimoto's thyroiditis, juvenile lymphocytic thyroiditis, atrophic thyroiditis), diabetes mellitus, immune-mediated renal disease (glomerulonephritis, tubulointerstitial nephritis), multiple sclerosis, idiopathic demyelinating polyneuropathy, Guillain-Barre syndrome, chronic inflammatory demyelinating polyneuropathy, non-hepatotropic viruses), autoimmune chronic active hepatitis, primary biliary cirrhosis, granulomatous hepatitis, and sclerosing cholangitis, inflammatory bowel disease (ulcerative colitis; Crohn's disease), gluten-sensitive enteropathy, and Whipple's disease. Autoimmune or

CC immune-mediated skin diseases including bullous skin diseases, erythema multiforme, contact dermatitis, psoriasis, asthma, allergic rhinitis, atopic dermatitis, food hypersensitivity, urticaria, eosinophilic pneumonia, idiopathic pulmonary fibrosis, hypersensitivity pneumonitis, and transplantation associated diseases (graft rejection and graft-versus-host-disease). (I), its (ant)agonists or fragment can also be used as an adjuvant in treatment of tumors. Antibodies against (I) can also be used for diagnosing such diseases. This sequence represents a nucleic acid sequence used in the construction of consensus sequence CC consen01 (AAX37716).

XX Sequence 99 BP; 17 A; 26 C; 27 G; 28 T; 1 other;

AAX56578 Length: 99 July 23, 2002 13:36 TYPE: N Check: 5254 ..

1 ATCTGCACTC AACTGCCAC CTCGGCTGGCA GGGATCTTG AATAGGATTC  
 51 TGAGCTGG TTCTGGGGGT CTTNCCTGT GTACTGACGA CCAGGGCA

!1NA\_SEQUENCE 1.0  
 ID AAF45470 standard; DNA; 15 BP.  
 XX  
 AC  
 XX  
 AAF45470;  
 XX  
 DT 30-MAR-2001 (first entry)  
 XX  
 DE IGFBP2 oligonucleotide #309.  
 XX  
 KW Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;  
 KW cytostatic; dermatological; cicatricial; virucide; ophthalmological; keloid;  
 KW IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pityriasis;  
 KW growth factor mediated cell proliferation; ichthyosis; seborrheo; rita;  
 KW keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;  
 KW hyperneovascular condition; hyperplasia; kidney disease;  
 KW neovascular condition of the retina; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 WO200078341-A1.  
 XX  
 PR 28-DEC-2000.  
 XX  
 PF 21-JUN-2000; 2000WO-A000693.  
 XX  
 PR 21-JUN-1999; 9905-0140345.  
 XX  
 PA (MURD-) MURDOCH CHILDRENS RES INST.  
 XX  
 PI Wright CJ, Werther GA, Edmondson SR;  
 XX  
 DR WPI; 2001-041421/05.  
 XX  
 PT Ameliorating the effects of a disorder, e.g. psoriasis, by  
 PT administering UV (ultra-violet) treatment (optional) and an antisense  
 PT nucleic acid that inhibits or reduces growth factor mediated cell  
 PT proliferation and/or inflammation -  
 XX  
 PS Example 6; Page 36; 201pp; English.  
 XX  
 CC The present invention relates to a method for ameliorating the effects  
 CC of skin disorders. The method comprises contacting the skin with an  
 antisense oligonucleotide, (for Insulin-like Growth Factor IGF]<sup>1</sup>  
 CC receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of  
 CC inhibiting or reducing growth factor mediated cell proliferation,  
 CC inflammation and/or other disorders. The present sequence is an  
 CC oligonucleotide which can be used to design the antisense  
 CC oligonucleotides of the present invention (see AAF45151 and  
 CC AAF45153-F45161). The method is useful for ameliorating the effects of  
 CC psoriasis, ichthyosis, pityriasis, ruba, pilaris, seborrheo, keloids,  
 CC keratosis, neoplasia, scleroderma, warts, benign growths, cancers of the  
 CC skin, a hyperneovascular condition such as a neovascular condition of the  
 CC retina, brain or skin, growth factor mediated malignancies, other  
 CC sclerotic disease, kidney disease, hyperproliferation of the inside of  
 CC blood vessels or any other hyperplasia.  
 XX  
 SQ Sequence 15 BP; 0 A; 7 C; 7 G; 1 T; 0 other;

AAF45470 Length: 15 July 23, 2002 13:44 Type: N Check: 8421 ..

1 CGGGCGTG GCCGC

! !NA\_SEQUENCE 1.0  
ID AAT05080 standard; DNA; 20 BP.  
XX  
AC  
XX  
AAT05080;  
XX  
DT 26-FEB-1996 (first entry)  
XX  
DE PCR primer (sense, exon 2).  
XX  
KW MAGE-2; tumour rejection antigen; cancer; diagnosis;  
XX  
polymerase chain reaction; PCR; primer; ss.  
XX  
OS Synthetic.  
XX  
PN WO9523874-A1.  
XX  
PD 08-SEP-1995.  
XX  
PF 23-FEB-1995; 95WO-US02203.  
XX  
PR 30-NOV-1994; 94US-0346774.  
PR 01-MAR-1994; 94US-0204727.  
PR 10-MAR-1994; 94US-0209172.  
PR 01-SEP-1994; 94US-0299849.  
XX  
PA (LUDWIG INST CANCER RESS.  
XX  
PI Boon-Falleur T, Brasseur F, Chomez P, De Plaein E;  
PI De Smet C, Gaugier B, Lethé B, Marchand M, Pattard J;  
PI Szikora J, Van Den Eynde B, Van Den Berghe P, Wernants P;  
XX  
WPI; 1995-320586/41.  
XX  
PT Determin. of cancerous condition(s) - using a nucleic acid as a  
PT primer to determine expression of a MAGE tumour rejection antigen  
PT precursor  
XX  
PS Claim 7; Page 91; 121PP; English.  
XX  
CC A PCR primer pair (AAT05080-81) correspond to a sense sequence in  
CC exon 2 of the tumour rejection antigen precursor MAGE-2 gene  
(AAT05092), and an antisense sequence in exon 3, respectively.  
CC The primers were used in PCR and RT-PCR to amplify the MAGE-2  
CC gene in various tumours and normal tissues. Expression was  
CC detected in lung tumours, neck and neck squamous cell carcinomas,  
CC prostate and bladder tumours and melanomas.  
XX  
SQ Sequence 20 BP; 6 A; 5 C; 7 G; 2 T; 0 other;  
AAT05080 Length: 20 July 23, 2002 13:44 Type: N Check: 4677 ..  
1 AAGTAGGACC CGAGGCACTG

!1NA\_SEQUENCE 1.0  
 ID AAV79987 standard; DNA; 20 BP.  
 XX  
 AC AAV79987;  
 XX  
 DT 24-FEB-1999 (first entry)  
 XX  
 DE BMP-2 DNA amplifying primer.  
 XX  
 KW Transgenic; osteogenic; core binding factor; CBFA1/PEBP2-alpha-A;  
 KW polyoma enhancer binding protein; runt; osteoblast; variant; BMP;  
 KW PCR primer; ss.  
 OS Synthetic.  
 XX  
 PN JP10309148-A.  
 XX  
 PD 24-NOV-1998.  
 XX  
 PR 11-SEP-1997; 97JP-0247346.  
 XX  
 PR 10-MAR-1997; 97JP-0074453.  
 XX  
 PA (KISHI/) KISHIMOTO G.  
 XX  
 DR WPI; 1999-063649/06.  
 XX  
 PT Transgenic animal with no osteogenic property - has introduced  
 PT variation in gene encoding core binding factor/polyoma enhancer  
 PT binding protein  
 XX  
 PS Example 10; Page 7; 19pp; Japanese.

XX  
 CC The invention provides a transgenic animal devoid of osteogenic  
 CC property. The transgenic animal has an introduced variation in a gene  
 CC encoding for core binding factor/polyoma enhancer binding protein  
 CC (CBFA1/PEBP2 alpha-A), particularly in runt region DNA, especially  
 CC prepared by introduction of a variation devoid of at least a part of gene  
 CC encoding CBFA1/PEBP2- alpha-A, leading to a disturbance in  
 CC differentiation and maturation of osteoblast cells. The transgenic animal  
 CC can be prepared by introducing a variant gene encoding for  
 CC CBFA1/PEBP2-alpha-A. The animal can be used to elucidate the in vivo  
 CC mechanism of CBFA1/PEBP2-alpha-A. Sequences AAV79975 to AAV8010  
 CC represent PCR primers used during the course of the invention.  
 XX  
 SQ sequence 20 BP; 4 A; 7 C; 6 G; 3 T; 0 other;

AAV79987 Length: 20 July 23, 2002 13:44 Type: N Check: 4575 ..

1 TGTACCGCAG GCACTCAGGC

! !NA\_SEQUENCE 1.0  
 ID AAZ87130 standard; DNA; 20 BP.  
 XX  
 AC  
 XX  
 DT 08-MAY-2000 (first entry)  
 XX  
 DE Human TRAP100 PCR primer 110/400, SEQ ID NO:32.  
 XX  
 KW Thyroid receptor-associated protein; TRAP220; TRAP100; coactivator;  
 KW TRAP complex; nuclear hormone receptor; thyroid receptor;  
 KW vitamin D receptor; oestrogen receptor; mineralocorticoid receptor;  
 KW peroxisome proliferation-activated receptor; LXXL motif; drug screening;  
 KW detection; PCR primer; ss.  
 XX  
 OS Homo sapiens.  
 OS Synthetic.  
 XX  
 PN WO200001820-A2.  
 XX  
 PD 13-JAN-2000.  
 XX  
 PR 01-JUL-1999; 99WO-US15052.  
 XX  
 PR 06-JUL-1998; 98US-0110517.  
 XX  
 (UVRQ ) UNIV ROCKEFELLER.  
 XX  
 PT Roeder RG, Fondell JD, Xingyuan C, Ito M;  
 XX  
 DR WPI; 2000-147418/13.  
 XX  
 PT New isolated Thyroid Receptor-Associated Proteins which act as nuclear  
 PT hormones or nuclear hormone receptors  
 XX  
 PS Example; page 75; 114pp; English.  
 XX  
 CC The invention relates to human thyroid receptor-associated proteins  
 CC TRAP220 (AAV69669) and TRAP100 (AAV69670) and nucleotides encoding them  
 CC (AAZ87101-287102). TRAP220 and TRAP100 are members of a complex of TRAPs  
 CC which act as coactivators for nuclear hormone receptors, binding  
 CC to such receptors in a ligand-dependent manner and are required for  
 CC functional interactions between the receptor and genes whose  
 CC transcription is regulated by these receptors. Nuclear hormone receptors  
 CC include thyroid receptors (TRs), vitamin D receptors (VDRs), oestrogen  
 CC receptors (ERs), mineralocorticoid receptors (MRS) and peroxisome  
 CC proliferation-activated receptors (PPARs). TRAP220 contains two of the  
 CC LXXL motifs that have been implicated in nuclear hormone receptor-  
 CC coactivator interactions, while TRAP100 contains six of these motifs.  
 CC TRAP220 and TRAP100, and their associated nucleotides, may be used to  
 CC modulate the activity of a nuclear hormone receptor, or to screen for  
 CC agents that modulate receptor or hormone activity. Proteins, nucleic  
 CC acids and antibodies may also be used therapeutically and for detection  
 CC of TRAP220 and TRAP100 or their associated nucleotides. Sequences  
 CC AAV87128-287146 represent PCR primers used to amplify and modify DNA  
 CC encoding TRAP100 for subcloning in an exemplification of the present  
 CC invention.  
 XX  
 Sequence 20 BP; 1 A; 9 C; 5 G; 5 T; 0 other;  
 SQ 1 CCTCCACCTGG CTGCTGGCT

AAZ87130 Length: 20 July 23, 2002 13:44 Type: N Check: 5308 ..

! NA\_SEQUENCE 1.0  
ID AAZ35534 standard; DNA; 20 BP.  
XX  
AC  
XX  
DT 28-JAN-2000 (first entry)  
XX  
DE Sense PCR primer for amplification of MAGE-2.  
XX  
KW MAGE-2; multiple myeloma marker; tumour rejection antigen precursor; tumour; chemotherapy; bone marrow transplant; PCR primer; diagnosis; ss.  
XX  
OS Synthetic.  
XX  
PN US5985571-A.  
XX  
PD 16-NOV-1999.  
XX  
PF 04-FEB-1998; 98US-0018422.  
XX  
PR 04-FEB-1998; 98US-0018422.  
XX  
PA (LUDWIG) LUDWIG INST CANCER RES.  
XX  
PI Van Baren N, Brasseur F, Boon-Falleur T;  
XX  
DR WPI: 2000-012780/01.  
XX  
PT Diagnosing a multiple myeloma through hybridization techniques -  
XX  
PS Claim 4; 8pp; English.  
XX  
PCR primers AAZ35534-235535 are used to amplify the MAGE-2 gene. The invention relates to members of the tumour rejection antigen precursor family, known as MAGE. MAGE-1, 2, 3, 4, 6 and 12 have been identified as markers for multiple myeloma. The primers are used in the invention in a method for determining multiple myeloma. The method involves contacting a nucleic acid molecule taken from a sample of bone marrow or blood with a hybridization probe which specifically hybridizes to a nucleic acid molecule encoding a MAGE protein, and determining specific hybridization of the probe to the nucleic acid molecule as an indication of multiple myeloma. Genes of the MAGE family are used in this method as markers for the diagnosis of tumours. The assay of the invention allows the determination of the presence of myeloma, multiple myeloma and late stage multiple myeloma. The determination assay can also be used to monitor the progression of a course of treatment such as chemotherapy or a bone marrow transplant, by monitoring the loss or decrease in MAGE expression as the myeloma regresses.  
XX  
Sequence 20 BP; 6 A; 5 C; 7 G; 2 T; 0 other;  
SQ  
AAZ35534 Length: 20 July 23, 2002 13:44 Type: N Check: 4677 ..  
1 AAGTGGACC CGAGGCACG

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!1NA_SEQUENCE 1.0
ID   AAS11416 standard; DNA; 20 BP.
XX
AC   AAS11416;
XX
DT   24-OCT-2001 (first entry).
XX
DE   Forward PCR primer used in analysis of tumour antigen MAGE-2.
XX
KW   colorectal cancer; immunostimulant; cytostatic; immune response; MAGE-2;
KW   adenocarcinoma; allogeneic tumour cell; SW620 cell; COLO 205 cell; ss;
KW   SW403 cell; colon; breast; lung; prostate; cancer; vaccine; PCR primer.
XX
OS   Synthetic.
XX
PN   WO200154716-A2.
XX
PD   02-AUG-2001.
XX
PF   26-JAN-2001; 2001WO-US02731.
XX
PR   27-JAN-2000; 2000US-0178498.
XX
PR   28-FEB-2000; 2000US-0185335.
XX
PA   (KIMM-) KIMMEL CANCER CENT SIDNEY.
XX
PA   (IMMU-) IMMUNE RESPONSE CORP.
XX
PI   Sobol RB, Shawler DL, Bartholomew RM, Carlo DJ, Gold DP;
XX
DR   WBI; 2001-502616/55.
XX
PT   New composition comprising an allogeneic tumour cell, useful for
PT   stimulating an immune response in a patient having an adenocarcinoma,
PT   especially useful for treating colorectal, breast, lung or prostate
PT   cancer -.
XX
PS   Example 1; Page 50; 131pp; English.
XX
CC   The invention relates to a composition for stimulating an immune response
CC   in a patient having an adenocarcinoma or colorectal cancer. The
CC   composition comprises an allogeneic tumour cell selected from SW620 cell,
CC   COLO 205 cell and SW403 cell, and a physiological carrier. The allogeneic
CC   cell stimulates an immune response to an autologous tumour cell in the
CC   patient. The composition is useful for stimulating an immune response in
CC   a patient having an adenocarcinoma, e.g. colon, breast, lung or prostate
CC   adenocarcinoma. The use of allogeneic tumour cells provides a generic
CC   source of antigen that can be administered to a variety of patients, in
CC   contrast to using autologous tumour cells, which must be isolated from
CC   each individual patient. The allogeneic cells are suitable as a cancer
CC   vaccine and can stimulate an immune response against autologous tumour
CC   cells of a cancer patient. The present sequence represents the forward
CC   PCR primer used in gene expression analysis of tumour antigen MAGE-2.
XX
SQ   Sequence 20 BP; 6 A; 5 C; 7 G; 2 T; 0 other;
XX
AAS11416 Length: 20 July 23, 2002 13:44 Type: N Check: 4677 ..
1 AAGTAGGACC CGAGGCACTG

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!1:NA\_SEQUENCE 1.0  
ID AAF84234 standard; DNA; 20 BP.  
XX  
AC AAF84234;  
XX  
DT 12-JUN-2001 (first entry)  
DE MAGE-A2 sense PCR primer.  
XX  
KW Multiple myeloma; tumour rejection antigen precursor; MAGE; BAGE; GAGE;  
KW LAGE; NY-ESO-1; PRAME; DAGE; PCR primer; human; ss.  
XX  
OS Homo sapiens.  
XX  
PN US6210886-B1.  
XX  
PD 03-APR-2001.  
XX  
PF 30-OCT-1998; 98US-0183931.  
XX  
PR 04-FEB-1998; 98US-0018422.  
XX  
(LUDW-) LUDWIG INST CANCER RES.  
XX  
PI van Baren N, Brasseur F, Bon-Falleur T;  
XX  
DR 2001-289628/30.  
XX  
PT Detecting multiple myeloma in a patient, comprises contacting a nucleic  
acid containing sample taken from bone marrow or blood with a  
hybridization probe specific for a tumor rejection antigen precursor -  
XX  
PS Claim 9; Column 4; 16pp; English.  
XX  
CC The present invention relates to a method for detecting multiple myeloma.  
CC The method comprises contacting a nucleic acid containing a sample taken  
CC from a bone marrow or blood of a patient, with a hybridisation probe  
CC specific for a tumour rejection antigen precursor. Tumour rejection  
CC antigen precursors used in the present invention are the MAGE family,  
CC BAGE, GAGE, NY-ESO-1 and PRAME (previously referred to as DAGE).  
CC Expression of the tumour rejection antigen precursor indicates possible  
CC multiple myeloma in the patient. The method can also be used for  
CC monitoring the disease progress and course of therapeutic regime. The  
CC present sequence is a PCR primer for a tumour rejection antigen precursor  
CC used in the present invention.  
XX  
SQ Sequence 20 BP; 6 A; 5 C; 7 G; 2 T; 0 other;  
AAF84234 Length: 20 July 23, 2002 13:45 Type: N Check: 4677 ..

1 AAGTAGGACC CGGGCACTG

!;NA\_SEQUENCE 1.0  
ID AAC67091 standard; DNA; 20 BP.  
XX  
AC AAC67091;  
XX  
DT 03-APR-2001 (first entry)  
XX  
DE MAGE tumour rejection antigen precursor PCR primer SEQ ID NO: 3.  
XX  
KW Tumour rejection antigen; MAGE-1; MAGE-2; MAGE-3; MAGE-4; MAGE-6;  
MAGE-12; cancer; myeloma; human; PCR primer; ss.  
XX  
OS Homo sapiens.  
XX  
PN US6165725-A.  
XX  
PD 26-DEC-2000.  
XX  
PF 12-JUL-1999; 99US-0351351.  
XX  
PR 04-FEB-1998; 98US-0018422.  
XX  
PA (LUDW-) LUDWIG INST CANCER RES.  
XX  
PI Brasseur F, Boon-Falleur T, Van Baren N;  
XX  
DR WPI; 2001-090479/10.  
XX  
PT Determining regression or progression of multiple myeloma in a patient, involves assaying bone marrow sample for expression of nucleic acid encoding MAGE protein and comparing with prior levels of MAGE expression -  
XX  
PS Claim 7; Column 4; 8pp; English.  
XX  
CC The present invention provides a method for determining progression or regression of multiple myeloma in a patient by assaying for the expression of tumour rejection antigen precursor proteins such as MAGE-1, MAGE-2, MAGE-3, MAGE-4, MAGE-5 and MAGE-12. This can be used in the diagnosis and treatment of cancer, particularly myeloma.  
XX  
SQ Sequence 20 BP; 6 A; 5 C; 7 G; 2 T; 0 other;  
AAC67091 Length: 20 July 23, 2002 13:45 Type: N Check: 4677 ..  
1 AAGTAGGACC CGAGGCACTG